Index to Volume 72

Author Index

Page numbers of errata are in italics

Abdel-Aal, E.-S. M., P. Hucl, and F. W. Sosulski. Compositional and nutritional characteristics of spring einkorn and spelt wheats, 621

Abecassis, J. See A. S. Contamine, 516

Ablett, S. See S. L. Duce, 105

Acquistucci, R., M. G. D'Egidio, and V. Vallega. Amino acid composition of selected strains of diploid wheat, Triticum monococcum L., 213 Almaer, S. See R. Ruan, 308

Andrews, D. C., R. A. Caldwell, and K. J. Quail. Sulfhydryl analysis. I. Determination of free sulfhydryls in wheat flour doughs, 326

-, and - Sulfhydryl analysis. II. Free sulfhydryl content of heated doughs from two wheat cultivars and effect of potassium bromate,

Archer, T. R., and T. J. Siebenmorgen. Milling quality as affected by brown rice temperature, 304

Arnason, J. T. See S. S. Miller, 421

Audet, J. See P. Gélinas, 151

Aussenac, T. See L. El Haddad, 598

Autio, K. See J. Räsänen, 637

Baik, B.-K., Z. Czuchajowska, and Y. Pomeranz. Discoloration of dough for oriental noodles, 198

Bariana, H. See M. Ciaffi, 465

Barlow, E. W. R. See C. Blumenthal, 135, 539

Bean, M. M. See S. R. Delwiche, 182

Bean, S. R. See G. L. Lookhart, 42, 312, 527

Bekes, F. See C. Blumenthal, 135, 539

Belitz, H.-D. See P. Schropp, 406

Bello, A. B., R. D. Waniska, M. H. Gomez, and L. W. Rooney. Starch solubilization and retrogradation during preparation of Tô (a food gel) from different sorghum cultivars, 80

BeMiller, J. N. See M. Obanni, 436 Berglund, P. T. See S. H. Yoon, 187

Berland, S., and B. Launay. Rheological properties of wheat flour doughs in steady and dynamic shear: Effect of water content and some additives, 48

Beta, T., L. W. Rooney, and R. D. Waniska. Malting characteristics of sorghum cultivars, 533

Bettge, A. D. See G. A. Greenblatt, 172

Bhatnagar, S. See K. Takamine, 385 Bhatty, R. S. See W. M. Ingledew, 147

See T. Vasanthan, 379

Bietz, J. A. See F. R. Huebner, 341, 504

- See A. Lapveteläinen, 259

See R. C. Pratt, 162

Blumenthal, C., F. Bekes, P. W. Gras, E. W. R. Barlow, and C. W. Wrigley. Identification of wheat genotypes tolerant to the effects of heat stress on grain quality, 539

P. W. Gras, F. Bekes, E. W. R. Barlow, and C. W. Wrigley. Communication to the Editor: Possible role for the Glu-DI locus with respect to tolerance to dough-quality change after heat stress, 135

Bockholt, A. J. See C. D. Floyd, 488

Bregitzer, P., M. Poulson, and B. L. Jones. Malting quality of barley lines derived from tissue culture, 433

Bushuk, W. See Y. Inoue, 221, 334

-. See H. R. Kim, 450

Byers, F. M. See N. D. Turner, 589

Caldwell, R. A. See D. C. Andrews, 326, 330

Campbell, M. R., L. M. Pollak, and P. J. White. Genetic variation for starch thermal and functional properties among nonmutant maize inbreds, 281

P. J. White, and L. M. Pollak. Properties of sugary-2 maize starch: Influence of exotic background, 389

Cavalieri, B. See R. Iori, 176

Cerletti, P. See L. Eynard, 594

Chambers, E., IV. See C.-Y. Chang, 237

Champagne, E. T., and C. C. Grimm. Stabilization of brown rice products using ethanol vapors as an antioxidant delivery system, 255

Chang, C.-Y., L. M. Seitz, and E. Chambers IV. Volatile flavor components of breads made from hard red winter wheat and hard white winter wheat,

Chelkowski, J. See J. Perkowski, 205

Chen, J., and J. Jane. Effectiveness of granular cold-water-soluble starch as a controlled-release matrix, 265

Chen, Y. R., S. R. Delwiche, and W. R. Hruschka. Classification of hard red wheat by feedforward backpropagation neural networks, 317

-. See S. R. Delwiche, 243

Chenoweth, W. L. See P. Ummadi, 564

Cherian, G., A. Gennadios, C. Weller, and P. Chinachoti. Thermomechanical behavior of wheat gluten films: Effect of sucrose, glycerin, and sorbitol, 1 Chinachoti, P. See G. Cherian, 1

Chung, D. S. See Y. J. Wang, 523

Ciaffi, M., D. Lafiandra, T. Turchetta, S. Ravaglia, H. Bariana, R. Gupta, and F. MacRitchie. Breadbaking potential of durum wheat lines expressing both X- and Y-type subunits at the Glu-A1 locus, 465

Clauwaert, W. See H. Jacobs, 480

Contamine, A. S., J. Abecassis, M.-H. Morel, B. Vergnes, and A. Verel. Effect of mixing conditions on the quality of dough and biscuits, 516

Curran, S. P. See D. M. Trigo-Stockli, 470 Czuchajowska, Z. See B.-K. Baik, 198

. See N. Erdogdu, 70, 76

Dale, B. E. See N. D. Turner, 589

D'Appolonia, B. L. See A. Debbouz, 128

Darke, A. H. See S. L. Duce, 105

Davis, E. A. See M. N. Tsoubeli, 64

Debbouz, A., W. J. Pitz, W. R. Moore, and B. L. D'Appolonia. NOTE: Effect of bleaching on durum wheat and spaghetti quality, 128

D'Egidio, M. G. See R. Acquistucci, 213

See B. M. Mariani, 194

Delcour, J. A. See H. Jacobs, 480

. See C. J. A. Vinkx, 227, 334, 411

Delwiche, S. R. Single wheat kernel analysis by near-infrared transmittance: Protein content, 11

, M. M. Bean, R. E. Miller, B. D. Webb, and P. C. Williams. Apparent amylose content of milled rice by near-infrared reflectance spectrophotometry, 182

Y .- R. Chen, and W. R. Hruschka. Differentiation of hard red wheat by near-infrared analysis of bulk samples, 243

See Y. R. Chen, 317

Desbois, P. See D. Le Botlan, 191

Dexter, J. E. See J. E. Fajardo, 291

Dhas, A. See K. C. Thomas, 360

Dong, W., and R. C. Hoseney. Effects of certain breadmaking oxidants and reducing agents on dough rheological properties, 58

Doublier, J.-L., and P. J. Wood. Rheological properties of aqueous solutions of (1→3)(1→4)-β-D-glucan from oats (Avena sativa L.), 335

D'Ovidio, R., M. Simeone, S. Masci, E. Porceddu, and D. D. Kasarda. Nucleotide sequence of a γ-type glutenin gene from a durum wheat: Correlation with a y-type glutenin subunit from the same biotype, 443

Duce, S. L., S. Ablett, A. H. Darke, J. Pickles, C. Hart, and L. D. Hall.

Nuclear magnetic resonance imaging and spectroscopic studies of wheat flake biscuits during baking, 105

Eckhoff, S. R. See N. Singh, 344

See B. E. Zehr, 491

Eerlingen, R. C. See H. Jacobs, 480

El Haddad, L., T. Aussenac, J.-L. Fabre, and A. Sarrafi. Relationships between polymeric glutenin and the quality characteristics for seven common wheats (Triticum aestivum) grown in the field and greenhouse,

Eoff, L. A. See D. A. Sampson, 217

Erdogdu, N., Z. Czuchajowska, and Y. Pomeranz. Wheat flour and defatted milk fractions characterized by differential scanning calorimetry. I. DSC of flour and milk fractions, 70

-, and ---. Wheat flour and defatted milk fractions characterized by differential scanning calorimetry. II. DSC of interaction products, 76

Eynard, L., N. Guerrieri, and P. Cerletti. Modifications of starch during baking: Studied through reactivity with amyloglucosidase, 594

Fabre, J.-L. See L. El Haddad, 598

Fajardo, J. E., J. E. Dexter, M. M. Roscoe, and T. W. Nowicki. Retention of ergot alkaloids in wheat during processing, 291

Flores, R. A. See W. Wang, 38
Floyd, C. D., L. W. Rooney, and A. J. Bockholt. Measuring desirable and undesirable color in white and yellow food corn, 488

Freeman, T. P. See P. Rayas-Duarte, 268 Frolich, W. See E. K. Molteberg, 88

Fulcher, R. G. See S. S. Miller, 421, 428

Gaines, C. S., A. Kassuba, and P. L. Finney. A soup model study comparing flour peak viscosity during heating and viscosity of flour gels during

García, M. A., M. N. Martino, and N. E. Zaritzky. Comparison of amylose enrichment procedures for food applications, 552

Geiger, H. H. See J. Perkowski, 205

Gélinas, P., J. Audet, O. LaChance, and M. Vachon. Fermented dairy ingredients for bread: Effects on dough rheology and bread characteristics,

, and O. LaChance. Development of fermented dairy ingredients as flavor enhancers for bread, 17

Gelroth, J. A. See G. S. Ranhotra, 30, 139, 365

Gennadios, A. See G. Cherian, 1 . See V. M. Ghorpade, 559

Ghorpade, V. M., A. Gennadios, M. A. Hanna, and C. L. Weller. Soy protein isolate/poly(ethylene oxide) films, 559

Glaser, B. K. See G. S. Ranhotra, 30, 365

Glenn, G. M., and D. W. Irving. Starch-based microcellular foams, 155

Gnanasambandam, R. See M. H. Lee, 352 Gomez, M. H. See A. B. Bello, 80

See E. L. Suhendro, 122

Gordon, J. See M. N. Tsoubeli, 64

Gras, P. W. See C. Blumenthal, 135, 539 Graybosch, R. A. See Y. W. Seo, 252

Greenblatt, G. A., A. D. Bettge, and C. F. Morris. Relationship between endosperm texture and the occurrence of friabilin and bound polar lipids on wheat starch, 172

Grimm, C. C. See E. T. Champagne, 255 Grobet, P. J. See C. J. A. Vinkx, 411

Gruppen, H. See C. J. A. Vinkx, 227, 334, 411

Guerrieri, N. See L. Evnard, 594

Gupta, R. See M. Ciaffi, 465

Habben, J. E. See B. R. Hamaker, 583

See G. L. Moro, 94

Hall, L. D. See S. L. Duce, 105

Hamaker, B. R., A. A. Mohamed, J. E. Habben, C. P. Huang, and B. A. Larkins. Procedure for extracting maize and sorghum kernel proteins, producing high prolamin contents, 583

See G. L. Moro, 94

Hanna, M. A. See V. M. Ghorpade, 559

See K. Takamine, 385

Härkönen, H. See J. Räsänen, 637

Hart, C. See S. L. Duce, 105

Hatcher, D. W. See J. E. Kruger, 33 Hazelton, J. L., and C. E. Walker. NOTE: Sample frequency effects on mixograms, 368

Henke, G. E. See A. L. McKendry, 142

Henriksson, K. See J. Jaskari, 625

Hettiarachchy, N. S. See M. H. Lee, 352 Hoseney, R. C. See W. Dong, 58

See K. E. Petrofsky, 53

See R. R. Roach, 578, 571

See S. N. Subrahmanyam, 7

See C. A. Thomasson, 616

Hou, G., and P. K. W. Ng. Quantification of glutenin subunits by sequential acetone precipitation and by sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) coupled with densitometry using a known quantity of glutenins as a standard, 545

Howes, N. K. See M. I. P. Kovacs, 85

Hruschka, W. R. See Y. R. Chen, 317

-. See S. R. Delwiche, 243

Huang, C. P. See B. R. Hamaker, 583

Huang, C. T. See W. Wang, 38

Hucl, P. See E.-S. M. Abdel-Aal, 621

Huebner, F. R., and J. A. Bietz. Rapid and sensitive wheat protein fractionation and varietal identification by narrow-bore reversed-phase high-performance liquid chromatography, 504

T. C. Nelsen, and J. A. Bietz. Differences among gliadins from spring and winter wheat cultivars, 341

-. See A. Lapveteläinen, 259

Ikeda, K., Y. Matsuda, A. Katsumaru, M. Teranishi, T. Yamamoto, and M. Kishida. Factors affecting protein digestibility in soybean foods, 401

Ingledew, W. M., A. M. Jones, R. S. Bhatty, and B. G. Rossnagel. Fuel alcohol production from hull-less barley, 147

-. See K. C. Thomas, 360

Inoue, Y., H. D. Sapirstein, and W. Bushuk. Studies on frozen doughs. IV. Effect of shortening systems on baking and rheological properties, 221,

Iori, R., B. Cavalieri, and S. Palmieri. Cathodic peroxidases of durum wheat flour, 176

Irving, D. W. See G. M. Glenn, 155

Jackson, D. S. See J. P. Mua, 508

. See D. L. Shandera, 371

Jacobs, H., R. C. Eerlingen, W. Clauwaert, and J. A. Delcour. Influence of annealing on the pasting properties of starches from varying botanical sources, 480

Jane, J. See J. Chen, 265

See T. Kasemsuwan, 457

Jaskari, J., K. Henriksson, A. Nieminen, T. Suortti, H. Salovaara, and K. Poutanen. Effect of hydrothermal and enzymic treatments on the viscous behavior of dry- and wet-milled oat brans, 625

Johansson, E., and G. Svensson. Contribution of the high molecular weight glutenin subunit 21* to breadmaking quality of Swedish wheats, 287, 512

Johnson, L. A. See M. Ö. Raeker, 167, 299 Jones, A. M. See W. M. Ingledew, 147

Jones, B. L. See P. Bregitzer, 433

Kasarda, D. D. See R. D'Ovidio, 443

-. See S. Masci, 100

. See W. H. Vensel, 356

Kasemsuwan, T., J. Janes, P. Schnable, P. Stinard, and D. Robertson. Characterization of the dominant mutant amylose extender (Ae1-5180) maize starch, 457

Kassuba, A. See C. S. Gaines, 233

Katsumaru, A. See K. Ikeda, 401

Keeling, P. L. See B. E. Zehr, 491

Kim, H. R., and W. Bushuk. Changes in some physicochemical properties of flour proteins due to partial reduction with dithiothreitol, 450

Kishida, M. See K. Ikeda, 401

Klopfenstein, C. F. See C. Sanchez, 25

Koskimies, S. See M.-L. Lähdeaho, 475

Kovacs, M. I. P., N. K. Howes, D. Leisle, and J. Zawistowski. Effect of two different low molecular weight glutenin subunits on durum wheat pasta quality parameters, 85

Kruger, J. E., and D. W. Hatcher. FY sedimentation test for evaluation of flour quality of Canadian wheats, 33

LaChance, O. See P. Gélinas, 17, 151

LaFiandra, D. See M. Ciaffi, 465

See S. Masci, 100

Lähdeaho, M.-L., E. Vainio, M. Lehtinen, P. Parkkonen, J. Partanen, S. Koskimies, and M. Mäki. Activation of celiac disease immune system by specific α-gliadin peptides, 475

Lambert-Guilois, S. See L. Meric, 609

Langemeier, J. M., and D. E. Rogers. Rapid method for sugar analysis of doughs and baked products, 349

See G. S. Ranhotra, 139

Lapveteläinen, A., J. A. Bietz, and F. R. Huebner. Reversed-phase highperformance liquid chromatography of oat proteins: Application to cultivar comparison and analysis of the effect of wet processing, 259

Larkins, B. A. See B. R. Hamaker, 583

-. See G. L. Moro, 94

Launay, B. See S. Berland, 48

Le Botlan, D., and P. Desbois. Starch retrogradation study in presence of sucrose by low-resolution nuclear magnetic resonance, 191

Lee, M. H., N. S. Hettiarachchy, R. W. McNew, and R. Gnanasambandam. Physicochemical properties of calcium-fortified rice, 352

Lehtinen, M. See M.-L. Lähdeaho, 475

Leisle, D. See M. I. P. Kovacs, 85

Lew, E. J.-L. See S. Masci, 100

Lii, C.-Y., Shao, Y.-Y., and K.-H. Tseng. Gelation mechanism and rheological properties of rice starch, 393

Lookhart, G. L , and S. R. Bean. A fast method for wheat cultivar differentiation using capillary zone electrophoresis, 42

, and —. Rapid differentiation of oat cultivars and of rice cultivars by capillary zone electrophoresis, 312

and ----. Separation and characterization of wheat protein fractions

by high-performance capillary electrophoresis, 527

Lopes, M. A. See G. L. Moro, 94

Lorenz, K. See D. A. Sampson, 217 Louis-Alexandre, A. See C. Mestres, 652

MacRitchie, F. See M. Ciaffi, 465

Mäki. M. See M.-L. Lähdeaho, 475

Mariani, B. M., M. G. D'Egidio, and P. Novaro. Durum wheat quality evaluation: Influence of genotype and environment, 194

Martino, M. N. See M. A. García, 552

Masci, S., E. J.-L. Lew, D. LaFiandra, E. Porceddu, and D. D. Kasarda. Characterization of low molecular weight glutenin subunits in durum wheat by reversed-phase high-performance liquid chromatography and Nterminal sequencing, 100

---. See R. D'Ovidio, 443

Masi, P. See L. Piazza, 320

Matencio, F. See C. Mestres, 652

Matsuda, Y. See K. Ikeda, 401

McDonough, C. M. See N. D. Turner, 589

McKendry, A. L., G. E. Henke, and P. L. Finney. Effects of Septoria leaf blotch on soft red winter wheat milling and baking quality, 142

McNew, R. W. See M. H. Lee, 352

Meric, L., S. Lambert-Guilois, O. Neyreneuf, and D. Richard-Molard. Cryoresistance of baker's yeast Saccharomyces cerevisiae in frozen dough: Contribution of cellular trehalose, 609

Mestres, C., F. Matencio, and A. Louis-Alexandre. Mechanical behavior of corn kernels. Development of a laboratory friability test that can predict milling behavior, 652

Mettler, E., and W. Seibel. Optimizing of rye bread recipes containing monodiglyceride, guar gum, and carboxymethylcellulose using a maturograph and an ovenrise recorder, 109

Miedaner, T. See J. Perkowski, 205

Miller, K. See R. C. Pratt, 162

Miller, R. A. See C. A. Thomasson, 616

Miller, R. E. See S. R. Delwiche, 182

Miller, S. S., and R. G. Fulcher. Oat endosperm cell walls: II. Hot-water solubilization and enzymatic digestion of the wall, 428

—, —, A. Sen, and J. T. Arnason. Oat endosperm cell walls: I. Isolation, composition, and comparison with other tissues, 421

Mohamed, A. A., and P. Rayas-Duarte. Composition of Lupinus albus, 643—, and —. Nonstarchy polysaccharide analysis of cotyledon and hull of Lupinus albus, 648

---. See B. R. Hamaker, 583

Molteberg, E. K., G. Vogt, A. Nilsson, and W. Frolich. Effects of storage and heat processing on the content and composition of free fatty acids in oats, 88

Moore, W. R. See A. Debbouz, 128

Morel, M.-H. See A. S. Contamine, 516

Morgan, J. E., and P. C. Williams. Starch damage in wheat flours: A comparison of enzymatic, iodometric, and near-infrared reflectance techniques, 209

Moro, G. L., M. A. Lopes, J. E. Habben, B. R. Hamaker, and B. A. Larkins. Phenotypic effects of opaque2 modifier genes in normal maize endosperm, 94

Morris, C. F. See G. A. Greenblatt, 172

Mua, J. P., and D. S. Jackson. NOTE: Fractionation of regular corn starch: A comparison of aqueous leaching and aqueous dispersion methods, 508 Müller, H.-M. See J. Perkowski, 205

Nelsen, T. See R. C. Pratt, 162

Nelsen, T. C. See F. R. Huebner, 341

Neyreneuf, O. See L. Meric, 609

Ng, P. K. W. See G. Hou, 545

Nieminen, A. See J. Jaskari, 625

Nilsson, A. See E. K. Molteberg, 88

Novaro, P. See B. M. Mariani, 194

Nowicki, T. W. See J. E. Fajardo, 291

Obanni, M., and J. N. BeMiller. Identification of starch from various maize endosperm mutants via ghost structures, 436

Palmieri, S. See R. Iori, 176

Parkhurst, A. M. See D. L. Shandera, 371

Parkkonen, P. See M.-L. Lähdeaho, 475

Partanen, J. See M.-L. Lähdeaho, 475

Partridge, J. E. See G. Yang, 568

Paulis, J. W. See R. C. Pratt, 162 Pedersen, J. R. See D. M. Trigo-Stockli, 470

Perkowski, J., T. Miedaner, H. H. Geiger, H.-M. Müller, and J. Chelkowski.

Occurrence of deoxynivalenol (DON), 3-acetyl-DON, zearalenone, and ergosterol in winter rye inoculated with Fusarium culmorum, 204

Peterson, C. J. See Y. W. Seo, 252

Peterson, D. M. Oat tocols: Concentration and stability in oat products and distribution within the kernel, 21

Petrofsky, K. E., and R. C. Hoseney. Rheological properties of dough made with starch and gluten from several cereal sources, 53

Piazza, L., and P. Masi. Moisture redistribution throughout the bread loaf during staling and its effect on mechanical properties, 320

Pickles, J. See S. L. Duce, 105 Pitz, W. J. See A. Debbouz, 128

Pollak, L. M. See M. R. Campbell, 281, 389

Pomeranz, Y. See B.-K. Baik, 198

Porceddu, E. See R. D'Ovidio, 443

Poulson, M. See P. Bregitzer, 433

Poutanen, K. See J. Jaskari, 625

Pratt, R. C., J. W. Paulis, K. Miller, T. Nelsen, and J. A. Bietz. Association of zein classes with maize kernel hardness, 162

Quail, K. J. See D. C. Andrews, 326, 330

Raeker, M. Ö., and L. A. Johnson. Cake-baking (high-ratio white layer) properties of egg white, bovine blood plasma, and their protein fractions, 299

—, and —. A micro method for cake baking (high ratio, white layer), 167

Ranhotra, G. S., J. A. Gelroth, and B. K. Glaser. Energy value of blends of polydextrose and a synthetic fat, 30

_____, and _____. Levels of medium-chain triglycerides and their energy value, 365

----, J. Langemeier, and D. E. Rogers. Stability and contribution of beta carotene added to whole wheat bread and crackers, 139

Räsänen, J., H. Härkönen, and Autio, K. Freeze-thaw stability of prefermented frozen lean wheat doughs: Effect of flour quality and fermentation time, 637

Ravaglia, S. See M. Ciaffi, 465

Rayas-Duarte, P., S. F. Robinson, and T. P. Freeman. In situ location of a starch granule protein in durum wheat endosperm by immunocytochemistry, 269

Richard-Molard, D. See L. Meric, 609

Roach, R. R., and R. C. Hoseney. Effect of certain surfactants on the starch in bread, 578

—, and ——. Effect of certain surfactants on the swelling, solubility, and amylograph consistency of starch, 571

Robertson, D. See T. Kasemsuwan, 457

Robinson, S. F. See P. Rayas-Duarte, 268

Robutti, J. L. Maize kernel hardness estimation in breeding by near infrared transmission analysis, 632

Rogers, D. E. See J. M. Langemeier, 349

- See G. S. Ranhotra, 139

Rooney, L. W. See A. B. Bello, 80

---. See T. Beta, 533

----. See C. D. Floyd, 488

. See E. L. Suhendro, 122

Roscoe, M. M. See J. E. Fajardo, 291

Rossnagel, B. G. See W. M. Ingledew, 147

---. See K. C. Thomas, 360

Ruan, R., S. Almaer, and J. Zhang. Prediction of dough rheological properties using neural networks, 308

Salovaara, H. See J. Jaskari, 625

Sampson, D. A., L. A. Eoff, X. L. Yan, and K. Lorenz. Analysis of free and glycosylated vitamin B6 in wheat by high-performance liquid chromatography, 217

Sanchez, C., C. F. Klopfenstein, and C. E. Walker. Use of carbohydratebased fat substitutes and emulsifying agents in reduced-fat shortbread cookies. 25

Sapirstein, H. D. See Y. Inoue, 221, 334

Sarrafi, A. See L. El Haddad, 598

Sathe, S.K. See D. F. Steenson, 275

Schnable, P. See T. Kasemsuwan, 457

Schropp, P., H.-D. Belitz, W. Seilmeier, and H. Wieser. Reoxidation of high molecular weight subunits of glutenin, 406

Seguchi, M. Surface staining of wheat starch granules with Remazolbrilliant blue R dye and their extraction with aqueous solution dodecyl sulfate/mercaptoethanol, 602

Seib, P. A. See P. Yang, 498

Seibel, W. See E. Mettler, 109 Seilmeier, W. See P. Schropp, 406

Seitz, L. M. See C.-Y. Chang, 237

Sen. A. See S. S. Miller, 421

Seo, Y. W., R. A. Graybosch, C. J. Peterson, and D. R. Shelton. Assessment of enzyme-linked immunoassay of rye secalins as a tool in the prediction of 1RS wheat quality, 252

Shandera, D. L., A. M. Parkhurst, and D. S. Jackson. Interactions of sulfur dioxide, lactic acid, and temperature during simulated corn wet milling,

Shao, Y .- Y. See C .- Y. Lii, 393

Shelton, D. R. See Y. W. Seo, 252

-. See G. Yang, 568

Siebenmorgen, T. J. See T. R. Archer, 304

Simeone, M. See R. D'Ovidio, 443

Singh, N., and S. R. Eckhoff. Hydrocyclone procedure for starch-protein separation in laboratory wet milling, 344

Singh, S. K. See B. E. Zehr, 491 Sosulski, F. W. See E.-S. M. Abdel-Aal, 621

Spillman, C. K. See Y. J. Wang, 523 Steenson, D. F., and S. K. Sathe. Characterization and digestibility of Basmati rice (Oryza sativa L. var. Dehraduni) storage proteins, 275

Stevens, I. See C. J. A. Vinkx, 411 Stinard, P. See T. Kasemsuwan, 457 Stringfellow, A. C. See V. V. Wu, 132

Subrahmanyam, S. N., and R. C. Hoseney. Shear thinning properties of sorghum starch, 7

Suhendro, E. L., R. D. Waniska, L. W. Rooney, and M. H. Gomez. Effects of polyols on the processing and qualities of wheat tortillas, 122

Suortti, T. See J. Jaskari, 625

Svensson, G. See E. Johansson, 287, 512

Takamine, K., S. Bhatnagar, and M. A. Hanna. Effect of eggshell on properties of corn starch extrudates, 385

Tarr, G. E. See W. H. Vensel, 356 Teranishi, M. See K. Ikeda, 401

Thomas, K. C., A. Dhas, B. G. Rossnagel, and W. M. Ingledew. Production

of fuel alcohol from hull-less barley by very high gravity technology, 360 Thomasson, C. A., R. A. Miller, and R. C. Hoseney. Replacement of chlorine treatment for cake flour, 616

Trigo-Stockli, D. M., S. P. Curran, and J. R. Pedersen. Distribution and occurrence of mycotoxins in 1993 Kansas wheat, 470

Tseng, K.-H. See C.-Y. Lii, 393

Tsoubelli, M. N., E. A. Davis, and J. Gordon. Dielectric properties and water mobility for heated mixtures of starch, milk protein, and water, 64

Turchetta, T. See M. Ciaffi, 465

Turner, N. D., C. M. McDonough, F. M. Byers, and B. E. Dale. Nutrient and microstructural indices of maize and sorghum responses to ammonia pressurization/depressurization, 589

Ummadi, P., W. L. Chenoweth, and P. K. W. Ng. Changes in solubility and distribution of semolina proteins due to extrusion processing, 564

Vachon, M. See P. Gélinas, 151

Vainio, E. See M.-L. Lähdeaho, 475

Vallega, V. See R. Acquistucci, 213

Vasanthan, T., and R. S. Bhatty. Starch purification after pin milling and air classification of waxy, normal, and high amylose barleys, 379

Vensel, W. H., G. E. Tarr, and D. D. Kasarda. C-Terminal and internal sequences of a low molecular weight (LMW-s) type of glutenin subunit,

Verbruggen, M. A. See C. J. A. Vinkx, 227, 334

Verel, A. See A. S. Contamine, 516

Vergnes, B. See A. S. Contamine, 516

Vinkx, C. J. A., I. Stevens, H. Gruppen, P. J. Grobet, and J. A. Delcour. Physicochemical and functional properties of rye nonstarch polysaccharides. VI. Variability in the structure of water-unextractable arabinoxylans, 411

J. A. Delcour, M. A. Verbruggen, and H. Gruppen. NOTE: Rye watersoluble arabinoxylans also vary in their 2-monosubstituted xylose content.

Vogt, G. See E. K. Molteberg, 88

Walker, C. E. See J. L. Hazelton, 368

-. See C. Sanchez, 25

Wang, W., R. A. Flores, and C. T. Huang. Physical properties of two biological cushioning materials from wheat and corn starches, 38 Wang, Y. J., D. S. Chung, and C. K. Spillman. Physical properties of

soybean meal, 523

Waniska, R. D. See A. B. Bello, 80 See T. Beta, 533

See E. L. Suhendro, 122

Webb, B. D. See S. R. Delwiche, 182 Wehling, R. L. See G. Yang, 568

Weller, C. See G. Cherian, 1

Weller, C. L. See V. M. Ghorpade, 559

Werner, W. E. Ferguson plot analysis of high molecular weight glutenin subunits by capillary electrophoresis, 248

White, P. J. See M. R. Campbell, 281, 389

Wieser, H. See P. Schropp, 406

Williams, P. C. See S. R. Delwiche, 182

See J. E. Morgan, 209

Wolf, W. J. Gel electrophoresis and amino acid analysis of the nonprotein nitrogen fractions of defatted soybean and almond meals, 115

Wood, P. J. See J.-L. Doublier, 335

Wrigley, C. W. See C. Blumenthal, 135, 539 Wu, V. V., and A. C. Stringfellow. NOTE: Enriched protein and β-glucan fractions from high-protein oats by air classification, 132

Yamamoto, T. See K. Ikeda, 401

Yan, X. L. See D. A. Sampson, 217

Yang, G., R. L. Wehling, M. G. Zeece, J. E. Partridge, and D. R. Shelton. NOTE: Characterization of hard red winter wheat storage proteins by twodimensional electrophoresis, and their correlations with selected quality parameters, 568

Yang, P., and P. A. Seib. Low-input wet-milling of grain sorghum for readily accessible starch and animal feed, 498

Yoon, S. H., P. T. Berglund, and C. E. Fastnaught. Evaluation of selected barley cultivars and their fractions for β-glucan enrichment and viscosity, 187

Zaritzky, N. E. See M. A. García, 552

Zawistowski, J. See M. I. P. Kovacs, 85

Zeece, M. G. See G. Yang, 568

Zehr, B. E., S. R. Eckhoff, S. K. Singh, and P. L. Keeling. Comparison of wet-milling properties among maize inbred lines and their hybrids, 491 Zhang, J. See R. Ruan, 308

Subject Index

Page numbers of errata are in italics. Acknowledgment of reviewers, v

Additives, effect on wheat flour dough viscoelastic properties (Berland and Launay), 48

Alcohol, fuel

-from hull-less barley (Thomas et al), 360

production from hull-less barley (Ingledew et al), 147

Almonds, determination and characterization of nonprotein nitrogen in defatted meal (Wolf), 115

Alveograph W, additive genotype effect (Mariani et al), 194

Amino acid

-composition; of diploid wheat (Acquistucci et al), 213

-sequences, of low-molecular-weight glutenin subunit (Vensel et al), 356

sequencing; characterization of in durum wheat biotypes differing in quality (Masci et al), 100

α-Amylase

soup model study comparing flour peak viscosity during heating and viscosity of flour gels during reheating (Gaines et al), 233

sprout damage influence on FY sedimentation test (Kruger and Hatcher).

Amylose

-content in rice; measured by NIR reflectance spectroscopy (Delwiche et al), 182

enrichment procedures compared with food application procedures (García et al), 552

Arabinoxylans

-from rye, structure (Vinkx et al), 227, 334

-rye, structure of water-unextractable arabinoxylans (Vinkx et al), 411

Baking

-bread, potential of durum wheat lines (Ciaffi et al), 465

-cake, properties of egg white, bovine blood plasma, and their protein fractions (Raeker and Johnson), 299

-micro method for (Raeker and Johnson), 167

-Septoria leaf blotch effect on soft red winter wheat (McKendry et al), 142

-shortening system effect on (Inoue et al), 221, 334

-starch modification during (Eynard et al), 594

-wheat flake biscuits; NMR imaging and spectroscopic studies (Duce et al), 105

Barley

-fractionation for β-glucan enrichment (Yoon et al), 187

-hull-less for fuel alcohol production (Thomas et al), 360

-hull-less, fuel alcohol from (Ingledew et al), 147

-tissue culture; malting quality of (Bregitzer et al), 433

-waxy, normal, and high amylose, prime starch purification (Vasanthan and Bhatty), 379

Bread and breadmaking

-baking potential of durum wheat lines (Ciaffi et al), 465
-effects of HMW subunit 21* found in Swedish wheats (Johansson and Svensson), 287, 512

-effect of oxidizing and reducing agents on dough rheological properties (Dong and Hoseney), 58

flavor and fermented dairy ingredients (Gélinas et al), 151

-flavor components (Chang et al), 237

-moisture redistribution during staling (Piazza and Masi), 320

optium formulation for rye bread (Mettler and Seibel), 109

-starch in, effect of surfactants on (Roach and Hoseney), 578

-whole wheat bread, stability and contribution of β-carotene addition (Ranhotra et al), 139

Brown rice

-stabilization with ethanol vapors as antioxidant delivery system (Champagne and Grimm,) 255

temperature; milling quality as affected by (Archer and Siebenmorgen), 304

-baking; properties of egg white, bovine blood plasma, and their protein fractions (Raeker and Johnson), 299

-flour, replacement of chlorine treatment (Thomasson et al), 616

-micro method for baking (Raeker and Johnson), 167

β-Carotene, stability and contribution of to whole wheat bread and crackers (Ranhotra et al), 139

Celiac disease, activation of immune system by specific \alpha-gliadin peptides (Lähdeaho et al), 475

Cell walls, oat endosperm

-isolation and composition (Miller et al), 421

solubilization and enzymatic digestion (Miller and Fulcher), 428

Cereal grains, wheat, vitamin B6 content of (Sampson et al), 217

Chromatography, of Fusarium mycotoxins (Perkowski et al), 205

Color, corn, subjective and objective measurements (Floyd et al), 488 Cookies, reduced fat shortbread (Sanchez et al), 25

Com

-effects of opaque2 modifier genes (Moro et al), 94

kernel hardness association with zein classes (Pratt et al), 162

kernels; laboratory friability test to predict milling behavior (Mestres et

measurement of color (Floyd et ai), 488

properties of extruded products (Wang et al), 38

starch microscopy (Obanni and BeMiller), 436

wet milling; hydrocyclone procedure for starch-protein separation (Singh and Eckhoff), 344

wet milling; interactions of sulfur dioxide, lactic acid, temperature (Shandera et al), 371

Corn starch

eggshell effect on properties of (Takamine et al), 385

-fractionation of, aqueous leaching and aqueous dispersion methods compared (Mua and Jackson), 508

-properties of extruded products (Wang et al), 38

-thermal and functional properties from inbreds (Campbell et al), 281

Crackers, stability and contribution of β-carotene addition (Ranhotra et al),

Dielectric properties, for heated mixtures of starch, milk protein, and water (Tsoubeli et al), 64

Differential scanning calorimetry

of corn starch from nonmutant inbreds (Campbell et al), 281

of flour and milk fractions (Erdogdu et al), 70

-of interaction products (Erdogdu et al), 76 of su-2 corn starch (Campbell et al), 389

Dough

-frozen, cryoresistance of baker's yeast in (Meric et al), 609

-frozen, lean wheat, freeze-thaw stability of, effect of flour quality and fermentation time (Räsänen et al), 637

frozen, shortening system effect on baking and rheological properties (Inoue et al), 221, 334

-heated wheat flour, free sulfhydryl content of (Andrews et al), 330

-mixing condition effect on quality (Contamine et al), 516

noodle, discoloration of (Baik et al), 198

rapid analysis of sugars (Langemeier and Rogers), 349

rheological properties (Ruan et al), 308

-rheology and fermented dairy ingredients (Gélinas et al), 151

-wheat flour, determination of free sulfhydryls in (Andrews et al), 326

wheat flour, viscoelastic properties of; effect of water content and of some additives (Berland and Launay), 48

Electrophoresis

-capillary, Fergus plot analysis of high molecular weight glutenin subunits by (Werner), 248

-capillary, of oat and rice prolamins (Lookhart and Bean), 312

-capillary zone of prolamin fractions (Lookhart and Bean), 42

-characterization of proteins in durum wheat biotypes differing in quality (Masci et al), 100

for hard red winter wheat storage protein characterization (Yang et al), 568 Emulsifiers, effects on rye bread quality (Mettler and Seibel), 109

Endosperm, physical and chemical analysis of corn modified normal genotypes (Moro et al), 94

Energy value

-of blends of polydextrose and a synthetic fat (Ranhotra et al), 30

-of medium-chain triglycerides (Ranhotra et al), 365

Enzymes, soup model study comparing flour peak viscosity during heating and viscosity of flour gels during reheating (Gaines et al), 233

Ergosterol, in rye kernels (Perkowski et al), 205

Ergot alkaloids, retention in wheat during processing (Fajardo et al), 291 Errata

-vol. 72, no. 2, pp. 226, 228, 334

—vol. 72, no. 3, pp. 287-288, 512

-high concentrations from hull-less barley (Thomas et al), 360

- -production from hull-less barley (Ingledew et al), 147
- vapors; for stabilization of brown rice products (Champagne and Grimm), 255

Extrusion

- processing; changes in solubility and distribution of semolina proteins (Ummadi et al), 564
- -properties of extruded wheat and corn starches (Wang et al), 38

Fat substitutes, use in shortbread cookies (Sanchez et al), 25 Flour

- -cake, replacement of chlorine treatment (Thomasson et al), 616
- -determination of damaged starch (Morgan and Williams), 209
- -durum wheat, cathodic peroxidases of (Iori et al), 176
- high-protein oat, influence of wet processing on protein composition (Lapveteläinen et al), 259
- —quality evaluation using FY sedimentation test (Kruger and Hatcher), 33
 —soup model study comparing flour peak viscosity during heating and
- —soup model study comparing flour peak viscosity during heating an viscosity of flour gels during reheating (Gaines et al), 233
- -wheat, determination of free sulfhydryls in (Andrews et al), 326
- -wheat, free sulfhydryl content of heated doughs (Andrews et al), 330

Fractionation

- -of barley for β-glucan enrichment (Yoon et al), 187
- of regular corn starch; aqueous leaching and aqueous dispersion methods compared (Mua and Jackson), 508
- Friabilin, relation with endosperm texture on wheat starch (Greenblatt et al), 172
- Gelation, rice starch, rheological properties during heating and cooling (Lii et al), 393
- α-Gliadin, peptides; celiac disease immune system activation (Lähdeaho et al), 475

Gliadin

- -fast CE procedure for identifying cultivars (Lookhart and Bean), 42
- -separation by RP-HPLC (Huebner and Bietz), 504

B-Glucan

- -enrichment by fractionation (Yoon et al), 187
- -from high-protein oats by air classification (Wu and Stringfellow), 132
- from oats, rheology in relation to macromolecular characteristics (Doublier and Wood), 335

Gluten

- -effect of reduction on gel protein (Kim and Bushuk), 450
- -film; thermomechanical behavior of (Cherian et al), 1
- -interaction with starch (Petrofsky and Hoseney), 53

Glutenin

- -gene from durum wheat, nucleotide sequence (D'Ovidio et al), 443
- -high molecular weight subunits; reoxidation (Schropp et al), 406
- —low-molecular-weight subunit, amino acid sequences (Vensel et al), 356
- —polymeric, relation with quality characteristics in wheat (El Haddad et al), 598
- --subunit quantification by sequential acetone precipitation and SDS-PAGE (Hou and Ng), 545
- —subunits; allelic composition, communication to the editor (Blumenthal et al), 135
- Grains, heat stress effect on quality, wheat genotype identification (Blumenthal et al), 539

Hardness

- -maize kernel, breeding estimation by NIT analysis (Robutti), 632
- -of maize kernels associated with zein classes (Pratt et al), 162
- HPEC, wheat protein fractions separated and characterized by (Lookhart and Bean), 527

HPLC

- —comparison of gliadins from hard red winter and spring wheats (Huebner et al), 341
- -separation of wheat proteins by RP-HPLC (Huebner and Bietz), 504
- —for sugar analysis in dough and baked goods (Langemeier and Rogers), 349

Instructions to authors, iii

Instruments and instrumentation, analytical technique (Hazelton and Walker), 368

Lupinus albus

- —composition of (Mohamed and Rayas-Duarte), 643
- -cotyledon and hull; nonstarchy polysacharide analysis of (Mohamed and Rayas-Duarte), 648

Maize

- -identification of endosperm mutant starch of (Obanni and BeMiller), 436
- -kernel hardness association with zein classes (Pratt et al), 162

- -kernel hardness; breeding estimation by NIT analysis (Robutti), 632
- kernel proteins; extraction procedure for high prolamin contents (Hamaker et al), 583
- -nutrient and microstructural indices of (Turner et al), 589
- —starch structure of dominant mutant amylose-extender (ae1-5180) (Kasemsuwan et al), 457
- —wet milling of inbred lines and their hybrids (Zehr et al), 491 Malting
- —quality of barley lines from tissue culture (Bregitzer et al), 433 —sorghum cultivar characteristics (Beta et al), 533

Methods

- —comparison of objective and objective color measurements (Floyd et al), 488
- -micro cake baking (Raeker and Johnson), 167
- -starch damage determination (Morgan and Williams), 209
- -vitamin B6 content of wheat by HPLC (Sampson et al), 217
- Microscopy, of starch ghosts (Obanni and BeMiller), 436
- Milk, fermented dairy ingredients for bread (Gélinas and La Chance), 17 Milling
- -of corn kernels; laboratory friability test for prediction (Mestres et al), 652
- -flour refinement influence on FY sedimentation test (Kruger and Hatcher), 33
- -quality affected by brown rice temperature (Archer and Siebenmorgen), 304
- -Septoria leaf blotch effect on soft red winter wheat (McKendry et al), 142
- —wet, hydrocyclone procedure for starch-protein separation (Singh and Eckhoff), 344
- Mixograph, sample frequency effects (Hazelton and Walker), 368

Mycotoxins

- —distribution and occurrence in 1993 Kansas wheat (Trigo-Stockli et al), 470
- -retention of ergot alkaloids in wheat during processing (Fajardo et al), 291
- -in rye kernels (Perkowski et al), 205

Neural networks

- -for classification of ground hard red wheat (Chen et al), 317
- —prediction of dough rheological properties (Ruan et al), 308

NIR spectroscopy

- -amylose content in rice (Delwiche et al), 182
- -classification of ground hard red wheat by neural networks (Chen et al),
- -classification of hard red wheat in bulk form (Delwiche et al), 243
- -protein content of single wheat kernels (Delwiche), 11
- -starch damage determination (Morgan and Williams), 209
- NMR, imaging,; of wheat flour biscuits during baking (Duce et al), 105
- Nonprotein nitrogen, determination and characterization of, in defatted soybean and almond meals (Wolf), 115
- Noodles, dough, discoloration of (Baik et al), 198

Oat

- -endosperm cell wall isolation and composition (Miller et al), 421
- endosperm cell walls, solubilization and enzymatic digestion (Miller and Fulcher), 428
- —free fatty acids in, effects of storage and heat processing on (Molteberg et al), 88
- -β-glucan in aqueous medium (Doublier and Wood), 335
- —high-protein, β -glucan and protein from, by air classification (Wu and Stringfellow), 132
- —protein characterization by RP-HPLC and SDS-PAGE (Lapveteläinen et al), 259
- -stability of tocols (Peterson), 21
- Oat bran, dry- and wet-milled, hydrothermal and enzymic treatment effect on viscous behavior of (Jaskari et al), 625

Pentosans

- —from rye, structure (Vinkx et al), 227, 334
- -rye, water-unextractable arabinoxylans, structure (Vinkx et al), 411
- Peroxidase, of durum wheat flour (Iori et al), 176
- Physicochemical properties @of calcium-fortified rice (Lee et al), 352
- Polydextrose, blends and a synthetic fat; energy value (Ranhotra et al), 30 Polyols, effect on processing and qualities of wheat tortillas (Suhendro et al), 122
- Polysaccharide, analysis, nonstarchy, of cotyledon and hull of *Lupinus albus* (Mohamed and Rayas-Duarte), 648P
- Prolamin, maize and sorghum kernel protein extraction procedure (Hamaker et al), 583

Protein

- characterization of in durum wheat biotypes differing in quality (Masci et al). 100
- —content and relationship with amino acid composition of wheat grain (Acquistucci et al), 213

- -content in single wheat kernels by NIR transmittance (Delwiche), 11
- -content; in durum wheat, additive environmental effect (Mariani et al), 194
- —contribution of HMW subunit 21* on breadmaking quality in Swedish wheats (Johansson and Svensson), 287, 512
- -digestibility; factors in soybean foods (Ikeda et al), 401
- -flour, physicochemical properties of (Kim and Bushuk), 450
- -gliadins characterized by capillary electrophoresis (Lookhart and Bean), 42
- -from high-protein oats by air classification (Wu and Stringfellow), 132
- —maize and sorghum kernel, extraction for high prolamin contents (Hamaker et al), 583
- —molecular weight determination of high molecular weight glutenin subunits from Ferguson analysis by capillary electrophoresis (Werner), 248
- -quantitation by ELISA (Moro et al), 94
- —salt-, alcohol-, and alkali-soluble fractions of oats; characterization by RP-HPLC and SDS-PAGE (Lapveteläinen et al), 259
- -secalins, relation to breadmaking quality (Seo et al), 252
- —semolina, changes in solubility and distribution due to extrusion processing (Ummadi et al), 564
- —separation of gliadins and glutenin subunits by RP-HPLC (Huebner and Bietz), 504
- —separation of oat and rice prolamins by capillary electrophoresis (Lookhart and Bean), 312
- —wheat storage, characterization by two-dimensional electrophoresis (Yang et al), 568
- Retrogradation, starch, in presence of sucrose by low-resolution NMR (Le Botlan and Desbois), 191
- Rheological properties, rice starch during gelation using dynamic rheometer (Lii et al), 393
- Rheology
- -dough mixing (Ruan et al), 308
- -effect of oxidizing and reducing agents on wheat flour dough (Dong and Hoseney), 58
- -of gluten-starch doughs (Petrofsky and Hoseney), 53
- oscillatory and flow measurements on wheat flour doughs (Berland and Launay), 48
- -shortening system effect on (Inoue et al), 221, 334

Rice

- -amylose analysis by NIR reflectance spectroscopy (Delwiche et al), 182
- —Basmati storage proteins, characterization and digestibility (Steenson and Sathe), 275
- -calcium-fortified, physicochemical properties (Lee et al), 352
- -gelation mechanism and rheological properties of starch (Lii et al), 393
- RP-HPLC, of oat proteins; application to cultivar comparison and analysis of the effect of wet processing (Lapveteläinen et al), 259

Rye

- -mycotoxin and ergosterol content in grain (Perkowski et al), 205
- -pentosan structure (Vinkx et al), 227, 334
- -water-unextractable arabinoxylans, structure of (Vinkx et al), 411
- Scanning electron microscopy, of starch-based microcellular foams (Glenn and Irving), 155

SDS-PAGE

- -of gluten fractions after partial reduction by DTT (Kim and Bushuk), 450
- -for glutenin subunit quantification (Hou and Ng), 545
- Semolina, proteins, changes in solubility and distribution due to extrusion processing (Ummadi et al), 564
- Sorghum
- -cultivars; malting characteristics of (Beta et al), 533
- —kernel proteins; extraction procedure for high prolamin contents (Hamaker et al), 583
- -nutrient and microstructural indices of (Turner et al), 589
- —starch; as measured by high-performance size-exclusion chromagraphy (Bello et al), 80
- -starch; shear thinning properties (Subrahmanyam and Hoseney), 7
- -to get readily accessible starch (Yang and Seib), 498
- Soy, protein isolate/poly(ethylene oxide) films (Ghorpade et al), 559 Soybean
- determination and characterization of nonprotein nitrogen in defatted meal (Wolf), 115
- -meal; physical properties of (Wang et al), 523
- —protein digestibility factors (lkeda et al), 401
- Spaghetti, bleaching effect on quality (Debbouz et al), 128
- Staling, moisture redistribution throughout bread loaf (Piazza and Masi), 320 Starch
- -annealing influence on pasting properties of (Jacobs et al), 480
- -in bread; effect of surfactants on (Roach and Hoseney), 578

- —corn, thermal and functional properties from inbreds (Campbell et al), 281
- -damage, measurement (Morgan and Williams), 209
- -dielectric properties and water mobility for heated mixtures of (Tsoubeli et al), 64
- granule protein; immunocytochemistry to locate durum wheat endosperm (Rayas-Duarte et al), 269
- -interaction with gluten (Petrofsky and Hoseney), 53
- -maize, yield from wet milling (Zehr et al), 491
- -microscopy of corn starch ghosts (Obanni and BeMiller), 436
- -modification during baking (Eynard et al), 594
- physically modified, cold-water-soluble, controlled-release for agricultural chemicals (Chen and Jane), 265
- -properties of extruded wheat and corn starches (Wang et al), 38
- -properties of microcellular foams (Glenn and Irving), 155
- -purification of waxy, normal, and high amylose barley (Vasanthan and Bhatty), 379
- —retrogradation; in presence of sucrose by low-resolution NMR (Le Botlan and Desbois), 191
- -rice, gelation mechanism and rheological properties (Lii et al), 393
- solubility and retrogradation; effect on sorghum porridge texture (Bello et al), 80
- -sorghum, shear thinning properties (Subrahmanyam and Hoseney), 7
- -structure of dominant mutant amylose-extender (Ae1-5180) maize (Kasemsuwan et al), 457
- -su-2, thermal and textural properties (Campbell et al), 389
- —surfactant effect on swelling, solubility, and amylograph consistency (Roach and Hoseney), 571
- -wheat granules, surface staining of (Seguchi), 602
- —wheat, relation between endosperm texture and friabilin and bound polar lipids on (Greenblatt et al), 172
- Storage, effect on free fatty acids in oats (Molteberg et al), 88
- Sugar, rapid method for analysis (Langemeier and Rogers), 349 Sulfhydryl
- analysis; determination of free sulfhydryls in wheat flour doughs (Andrews et al), 326
- ---analysis; free sulfhydryl content of wheat doughs (Andrews et al), 330
- Surfactants
 —effect on starch in bread (Roach and Hoseney), 578
- -effect on swelling, solubility, and amylograph consistency of starch (Roach and Hoseney), 571
- Temperature, brown rice, milling quality as affected by (Archer and Siebenmorgen), 304
- Tocols, concentration and stability in oats (Peterson), 21
- Tortillas, wheat; polyol effect on processing and qualities of (Suhendro et al), 122
- Triglycerides, medium-chain, energy value (Ranhotra et al), 365
- Water mobility, for heated mixtures of starch, milk protein, and water (Tsoubeli et al), 64
- Wet milling
- —corn, interactions of sulfur dioxide, lactic acid, temperature (Shandera et al), 37
- -grain sorghum; for readily accessible starch and animal feed (Yang and Seib), 498
- -maize; comparison of yield from inbred lines and their hybrids (Zehr et al), 491 Wheat
- -classification by neural networks (Chen et al), 317
- —classification distinguished by NIR reflectance on bulk samples (Delwiche et al). 243
- —contribution of HMW subunit 21* on breadmaking quality (Johansson and Svensson), 287, 512
- diploid, amino acid composition and protein content (Acquistucci et al),
 213
- —dough; freeze-thaw stability of prefermented frozen lean, effect of flour quality and fermentation time (Räsänen et al), 637
- durum, cultivar and environment effects and their interaction on quality characteristics (Mariani et al), 194
- -durum, effect of bleaching on (Debbouz et al), 128
- -durum, glutenin gene from, nucleotide sequence (D'Ovidio et al), 443
- -durum endosperm, starch granule protein in (Rayas-Duarte et al), 269
- -durum quality (Kovacs et al), 85
- -einkorn and spelt compared to HRS and durum (Abdel-Aal et al), 621
- fast varietal identification using narrow-bore RP-HPLC columns (Huebner and Bietz), 504
- -flour fractions; characterized by DSC (Erdogdu et al), 70, 76
- —genotype identification, heat stress effect on grain quality (Blumenthal et al), 539
- -gluten film; thermomechanical behavior of (Cherian et al), 1

-mycotoxins in (Trigo-Stockli et al), 470

-polymeric glutenin and quality characteristic relation (El Haddad et al), 598

—properties of extruded products (Wang et al), 38
—protein fractions; separation and characterization by HPCE (Lookhart and Bean), 527

-quality of wheat-rye chromosomal translocations (Seo et al), 252

- —quanty of wheat-tye chromosomal transfocations (see et al), 252
 —red and white flavor chemistry (Chang et al), 237
 —retention of ergot alkaloids during processing (Fajardo et al), 291
 —similarity of gliadins from spring and winter wheats (Huebner et al), 341
 —single kernel protein content by NIR transmittance (Delwiche), 1
- -soft red winter, Septoria leaf blotch effect on milling and baking quality (McKendry et al), 142
 —starch granules; surface staining of (Seguchi), 602

- -storage protein characterization by two-dimensional electrophoresis (Yang et al), 568
- -tortillas; polyol effect on processing and qualities of (Suhendro et al), 122
- -vitamin B6 content of, pyridoxine glucoside content of (Sampson et al), 217

- -association of classes with maize kernel hardness (Pratt et al), 162
- -in maize normal endosperm (Moro et al), 94

